

CLAIMS

What is claimed is:

- 1 1. A buffer circuit that outputs a bias signal for biasing a cascode LNA, the
2 buffer comprising:
3 an input emitter-follower stage that receives an input signal and produces the bias
4 signal at an output terminal;
5 a gain stage coupled to the emitter-follower stage;
6 a load coupled to the emitter-follower stage; and
7 a feedback circuit coupled to the load and the gain stage.
- 1 2. A bias circuit that outputs a bias signal for biasing an amplifier, the bias
2 circuit comprising:
3 an input stage that receives an input signal and produces the bias signal at an output
4 terminal that is coupled to a gain stage;
5 a load coupled to the input stage at a first terminal; and
6 a feedback circuit coupled between the first terminal and the gain stage.
- 1 3. The bias circuit of claim 2, wherein the input stage comprises an emitter-
2 follower input stage.
- 1 4. The bias circuit of claim 2, wherein the gain stage comprises a common-
2 emitter gain stage that has a base terminal.
- 1 5. The bias circuit of claim 4, wherein the feedback circuit is coupled between
2 the first terminal and the base terminal.
- 1 6. The bias circuit of claim 5, wherein the feedback circuit comprises:
2 first and second diodes; and
3 a capacitor coupled to the first and second diodes.
- 1 7. The bias circuit of claim 2, where in the feedback circuit comprises:
2 first and second diodes; and

3 a capacitor coupled to the first and second diodes.

1 8. The bias circuit of claim 2, wherein the feedback circuit comprises a current
2 source coupled to the gain stage.